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Relationships among higher-order strengths factors, subjective well-being, and general self-efficacy – The case of Israeli adolescents

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Abstract

We investigated relationships among five higher-order strengths factors, subjective well-being, and general self-efficacy in participants that live under challenging conditions. Therefore, a sample of 396 Israeli adolescents (aged 13-18 years) completed the Values-in-Action Inventory of Strengths for Youth, the Satisfaction With Life Scale, the Affect Balance Scale, and the General Self-Efficacy Scale. An orthogonally rotated principal component analysis of the 24 character strengths yielded five strengths factors that explained 32% of the variance in life satisfaction, with transcendence strengths as most substantial predictor. The strongest predictors of positive affect were transcendence and leadership strengths; the best predictors of negative affect were transcendence and temperance strengths; and the strongest predictors of affect balance were transcendence strengths. The five strengths factors explained 46% of the variance in general self-efficacy, with leadership strengths as the most substantial predictor. Further analysis indicated that general self-efficacy mediated the relationship between leadership strengths and global life satisfaction. The results suggest that different strengths factors are relevant for different positive experiences (e.g., life satisfaction, self-efficacy beliefs). The findings shed light on the contribution of specific character strengths as a meaningful resource under stressful conditions.

***Keywords*:** character strengths; higher-order strengths factor; subjective well-being; general self-efficacy; adolescents

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1. Introduction

Over the last decade there has been an increasing interest in the relationship between character strengths (Peterson & Seligman, 2004) and positive subjective experiences (e.g., life satisfaction). This relationship has been studied mostly among adults (e.g., Littman-Ovadia & Lavy, 2012; Peterson, Ruch, Beermann, Park, & Seligman, 2007; Ruch et al., 2010), and to a much lesser degree among young people (e.g., Park & Peterson, 2006, Van Eeden, Wissing, Dreyer, Park, & Peterson, 2008). In an attempt to expand our understanding of character strengths' association with positive subjective experiences of young people around the globe, the present study focused on Israeli adolescents as a group living under stressful environmental conditions.

For most adolescents in Western countries adolescence is a period of time characterized by self-exploration, exploring the adult world, and gaining excitement (cf. Mayseless & Salomon, 2003). Israeli adolescents live quite different lives in a relatively new country that is mostly composed of immigrants from 70 different nations and cultures, which often leads to inner conflicts. Additionally, Israeli adolescents still live with the danger of war and terrorism, and about 70 % believe that terrorism could become a likely event in their daily lives (cf. Mayseless & Salomon, 2003).

Park (2004) postulated character strengths as protective factors - also against stress and trauma, which would enable a positive youth development even under demanding conditions. The present study explored the role of character strengths in this specific adolescent sample to examine empirically the expectation that the same personal characteristics that strengthen adolescents living under normal conditions also strengthen adolescents living in such a demanding environment.

The Values in Action (VIA) classification (Peterson & Seligman, 2004) facilitated the study of a comprehensive model of 24 different character strengths - morally valued personality traits. Empirical research of the relationships among these 24 character strengths and their underlying structure in young people showed that five-factorial solutions best fit the data (e.g., Gillham et al., 2011; Ruch, Weber, Park, & Peterson, in press; Toner, Haslam, Robinson, & Williams, 2012). For example, Gillham et al. (2011) and Ruch et al. (in press) found similar factors in adolescent samples: They labeled the factors intellectual strengths, leadership strengths, other-directed strengths, temperance strengths, and transcendence strengths. The present study examined the role of these higher-order strengths factors for Israeli adolescents' subjective well-being and self-efficacy beliefs.

Character strengths were postulated as contributing to a *good* and *fulfilling* life (Peterson & Seligman, 2004), which is not comprehensively defined yet, but is thought to include a high level of subjective well-being (SWB; i.e., high life satisfaction, high positive affectivity, and low negative affectivity). A related (but different) psychological variable, self-efficacy, defined as "peoples' beliefs in their capabilities to produce desired effects by their own actions" (Bandura, 1997, p. vii), was described as an important characteristic of positive youth development (Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2004). Especially in such a stressful environment of Israeli adolescents, high general self-efficacy (GSE) might be a precursor of a good life, as GSE is seen as a resource that buffers against stressful experiences, because high self-efficacious individuals perceive demands as challenging, not as threatening (Jerusalem & Schwarzer, 1992).

With respect to SWB, initial evidence showed that global life satisfaction (LS), the cognitive component of SWB (Diener, Suh, Lucas, & Smith, 1999), was most highly correlated with character strengths like zest, love, gratitude, and hope in young people (e.g., Park & Peterson, 2006; Van Eeden et al., 2008). On higher-order level the transcendence

strengths factor (e.g., hope, religiousness, gratitude) was a substantial predictor of LS in American adolescents (Gillham et al., 2011).

The character strengths most highly correlated with the affective components of SWB were similar to those most highly associated with the cognitive component of SWB: Zest, hope, love, gratitude, perseverance, and social intelligence showed the highest positive relationships with positive affect (PA; Van Eeden et al., 2008); and zest, love, gratitude, and hope showed the highest negative relationships with negative affect (NA). Affect balance (AB; difference between PA and NA) was positively correlated with zest, hope, love, gratitude, social intelligence, perseverance, and religiousness. Although findings show that character strengths are related to SWB, the evidence for this relationship among adolescents, examined in only a few studies, has yet to be established. The present study explored the link between character strengths and SWB in adolescents living under demanding conditions.

There is first evidence that character strengths like, for example, creativity, hope, perspective, social intelligence, and teamwork are strongly related to GSE in young people (Ruch et al., in press). With respect to this initial result it is expected that specific higher-order strengths factors (e.g., leadership strengths) might also be related to GSE in Israeli adolescents.

1.1 The present study

The present study examined the relationships between higher-order strengths factors, SWB, and GSE in Israeli adolescents. Hence, the purpose of the present study was threefold.

- The *first* aim was to examine the relationships between higher-order strengths factors and SWB (i.e., LS, PA, NA, and AB). Based on the basic assumption of the ubiquitous nature of human strengths (Peterson & Seligman, 2004), and on the similarities between Israeli adult samples to those in the US and Europe (Littman-Ovadia & Lavy, 2012), despite Israel's specific characteristics, it is hypothesized that the transcendence strengths factor would also be a substantial

contributor to LS in Israeli adolescents (e.g., Gillham et al., 2011). Furthermore, the present study hypothesized that the transcendence strengths factor will also be strongly related to the affective components of SWB, because components of this factor were found as substantial predictors of PA and NA in South African youth (Van Eeden et al., 2008).

- Because character strengths seem to be predictive of GSE as a buffer against negative effects of difficulties (Jerusalem & Schwarzer, 1992; Ruch et al., in press), the *second* aim of the present study was to examine the relationships between higher-order strengths factors and GSE. This was of interest because it is unclear yet whether there are specific strengths factors that are more relevant to establish self-efficacy than others, especially in complex environmental circumstances. It is hypothesized that leadership strengths significantly contribute to GSE, because this factor comprises of character strengths such as leadership, perspective, and bravery, which might be useful buffers against stressful conditions.
- Because LS was associated with GSE (e.g., Suldo & Huebner, 2006), and character strengths were associated with both LS and GSE, the *third* more exploratory aim of this study was to examine the role of GSE in mediating the association between specific strengths factors (e.g., leadership) and LS. Specifically, it was hypothesized that endorsement of leadership-related character strengths promotes the development of GSE, which in turn contributes to adolescents' life satisfaction. These associations and the mediating role of self-efficacy are assumed to be especially strong among Israeli adolescents, based on Mayseless and Salomon's (2003) analysis of these adolescents' difficulties and their resulting characteristics. In sum, the present study

examined the contribution of specific strengths factors to SWB and to GSE in adolescents living under difficult and stressful conditions.

2. Method

2.1 Participants

The sample consisted of 396 Israeli adolescents (50.3 % male). Their mean age was 15.76 years (*SD* = 1.57; aged 13-18 years). Most of them (73.2%) described themselves as secular.

2.2 Instruments

The *Values in Action Inventory of Strengths for Youth* (*VIA-Youth*; Park & Peterson, 2006) consists of 198 items for the assessment of the 24 character strengths of the VIA classification (Peterson & Seligman, 2004). There are 7-9 items per strength, and about one third of the items are reverse coded. The VIA-Youth uses a 5-point Likert-style format (from 1 = *not like me at all* to 5 = *very much like me*). A sample item is: ”I always keep my word“ (honesty). In the present study, a Hebrew version of the VIA-Youth was used. The original inventory (Park & Peterson, 2006) was translated into Hebrew independently by two bilingual Israeli. Translations were discussed, differences resolved in consensus, and given to a pilot sample of bilingual students who also completed the original English questionnaire and provided feedback on differences between both versions. Based on their comments a final translation was created, which was back-translated into English by two bilingual psychologists familiar with the concepts. After comparing the back-translation to the original inventory, several minor revisions were made. Generally, the VIA-Youth proved to be a reliable and valid measurement (e.g., Park & Peterson, 2006; Ruch et al., in press). The Hebrew VIA-Youth also showed good internal consistencies in the present study (median was α = .75; all scales showed internal consistencies > .65, with three exceptions: social intelligence, fairness and self-regulation).

To reduce the number of variables in the analyses of this initial research in Israeli adolescents, a principal component analysis (PCA) was computed for the 24 scales. Eigenvalues of five factors exceeded unity and also the scree test suggested the retention of five factors (Eigenvalues: 8.12, 2.15, 1.72, 1.45, 1.23, 0.95, and 0.87) explaining 61.10 % of the variance. The five factors were subsequently rotated using the varimax routine (see Table 1 for loadings).

Insert Table 1 about here

Table 1 shows that most character strengths were markers for only one of the five factors (median of the highest loadings was .61). Only one scale (i.e., kindness) demonstrated a double loading with a difference ≤ .10. The resulting factor-solution showed high convergences (Tucker's phi) of .93, .93, .94, .95, and .95 for the corresponding factors presented by Ruch et al. (in press). The factors resembled those found by Ruch et al. (in press), and were labeled accordingly (with one exception: the scale honesty showed its highest loading on a different factor, but it showed a second, lower loading on that factor reported by Ruch et al., in press). Factor 1 was mostly represented by *leadership strengths* (e.g., perspective, leadership, humor), factor 2 *other-directed strengths* (e.g., modesty, fairness, teamwork), factor 3 *intellectual strengths* (e.g., curiosity, love of learning, creativity), factor 4 *transcendence strengths* (e.g., religiousness, gratitude, love), and factor 5 *temperance strengths* (e.g., prudence, self-regulation, open-mindedness). All analyses in the present study were based on the factor scores of the five strengths factors.

The *Satisfaction With Life Scale* (*SWLS*; Diener, Emmons, Larsen, & Griffin, 1985) consists of 5 items assessing individuals' global life satisfaction. Respondents rate their agreement with each item (e.g., "I am satisfied with my life") on a seven-point scale (from 1 = *strongly disagree* to 7 = *strongly agree*). In the present study, the Hebrew version of the SWLS (Anaby, Jarus, & Zumbo, 2010) yielded an internal consistency of $\alpha = .77$.

The *Affect Balance Scale* (*ABS*; Bradburn, 1969) is a 10-item measure of positive and negative affect (5 items assessing positive affect, PA, e.g., pleased, proud; 5 items assessing negative affect, NA, e.g., depressed, bored). Items are rated on a four-point scale referring to the frequency of each experience during the past week (from 1 = *never* to 4 = *often*). An indicator for affect balance (AB) was computed by subtracting NA from PA scores. In the present study, the Hebrew version of the ABS (Shmotkin, 1990) yielded internal consistencies of $\alpha = .68$ and $\alpha = .61$ for PA and NA, respectively.

The *General Self-Efficacy Scale* (*GSE*; Schwarzer & Jerusalem, 1995) consists of 10 items assessing optimistic self-beliefs to cope with a variety of difficult demands in life with statements such as "I can usually handle whatever comes my way". Respondents rate their agreement with each item on a four-point scale (from 1 = *not describe me at all* to 4 = *describes me to a great extent*). In the present study, the Hebrew version of the GSE (Zeidner, Schwarzer & Jerusalem, 1993) yielded an internal consistency of $\alpha = .82$.

2.3 Procedure

Data were collected by undergraduate psychology students as part of their duties in an empirical research course. Following the consent of the educational institution, the questionnaires were administered to students by their teachers in a single 45-minute session during a regular school day. Participants were advised to answer the questionnaires at their own pace.

2.4 Data analysis

All analyses (i.e., correlations, hierarchical regressions, mediation) were computed using the statistical software package SPSS 20. The mediation analysis followed the guidelines of Baron and Kenny (1986).

3. Results

3.1 Preliminary analyses

Zero-order Pearson correlations showed that the higher-order strengths factors were slightly affected by participants' age. Older participants were more likely to report higher leadership strengths ($r = .21$, $p < .001$), and younger participants reported higher transcendence strengths ($r = -.24$, $p < .001$). Other-directed strengths, intellectual strengths, and temperance strengths were somewhat higher among older participants, but showing small effect sizes (rs $\approx .12$, $p < .05$). Girls were more likely to score higher on other-directed strengths ($r = .32$, $p < .001$), and on intellectual strengths ($r = .15$, $p < .05$). Younger participants tended to report higher negative affect ($r = -.12$, $p < .05$), and older students tended to report higher self-efficacy beliefs ($r = .15$, $p < .05$). There were no gender differences in the components of SWB and in general self-efficacy.

Correlations between LS, PA, NA, AB, and GSE indicated positive relationships between LS, PA, AB, and GSE. NA was negatively correlated with LS and GSE. PA and NA were not correlated (see Table 2).

Insert Table 2 about here

3.2 Strengths factors and subjective well-being (SWB)

Four hierarchical regression analyses were computed with LS, PA, NA, and AB as criterion variables. In step 1, age and gender were entered to the analyses, followed by the five strengths factors in step 2 (see Table 3). Results showed that LS was best predicted by the transcendence strengths factor, followed by the leadership strengths factor. All five strengths factors explained 32% of the variance in LS ($F_{change}[5, 386] = 37.19$, $p < 0.001$).

Insert Table 3 about here

The strengths factors also contributed to the emotional components of SWB (see Table 3). They explained 28 %, 15 %, and 34 % of the variance in PA, NA, and AB, respectively ($F_{change}[5, 386] = 31.08$, $p < .001$; $F_{change}[5, 386] = 14.18$, $p < .001$; and F_{change}

[5, 386] = 39.50, $p < .001$, respectively). Transcendence, leadership, and intellectual strengths were the most substantial predictors of PA, whereas transcendence and temperance strengths were the most substantial predictors of NA. Affect balance was best predicted by transcendence, leadership, and temperance strengths.

3.3 Strengths factors and general self-efficacy (GSE)

A hierarchical regression analysis was conducted with GSE as criterion. In step 1, age and gender were entered to the regression equation, followed by the five strengths factors in step 2 (see Table 4).

Insert Table 4 about here

Results indicated that leadership strengths, followed by intellectual, and temperance strengths were the most substantial predictors of GSE. In total, the five strengths factors explained 46 % of the variance in GSE (F_{change}[5, 273] = 48.47, $p < .001$).

3.4 General self-efficacy (GSE) as a mediator of the relationship between leadership strengths and global life satisfaction

Figure 1 summarizes the results of the mediation analysis in four steps (cf. Baron & Kenny, 1986). The leadership strengths factor (i.e., independent variable) was significantly correlated with LS (i.e., criterion variable) (step 1), and with GSE (i.e., mediator variable) (step 2). Predicting LS simultaneously with both GSE and leadership strengths, GSE was significantly related to LS (step 3). Step 4 indicated that GSE fully mediated the relationship between leadership strengths and LS, as the regression coefficient of leadership strengths on LS failed to be significant (.09, ns.).

Insert Figure 1 about here

4. Discussion

The main aim of the present study was to examine the relationships of higher-order strengths factors with positive experiences like SWB and personal resources like GSE, in a specific sample of Israeli adolescents – young people living in a complex environment of a relatively new society, composed of several sub-cultures, in an uncertain security situation (e.g., Mayseless & Salomon, 2003). *First*, in line with Gillham et al. (2011) and Van Eeden et al. (2008), the present study shows meaningful relationships between *transcendence* strengths and LS, PA, NA, and AB, suggesting that character strengths contribute to a good and fulfilled life even in this relatively stressful environment. Specifically, having coherent beliefs about a life's meaning (religiousness/spirituality), expecting the good for the future (hope), being grateful for all the good that happen (gratitude), appreciating close relationships (love), and approaching life with energy and enthusiasm (zest) (cf. Park & Peterson, 2006) seem to promote PA and LS, and help eliminating NA. These findings correspond with previous research conducted in the US (Gillham et al., 2011) indicating that the transcendence strengths factor (e.g., religiousness, hope, love) is a substantial predictor of the cognitive component of SWB (i.e., LS), and with research conducted in South Africa linking character strengths (e.g., zest, hope, love, gratitude) to the emotional components of SWB (i.e., PA and NA; Van Eeden et al., 2008). Furthermore, in the present study *temperance* strengths seem to matter only for NA and not for PA. Regulating one's own feelings and behavior (self-regulation), thinking before executing actions (prudence), and completing what has begun (perseverance) (cf. Park & Peterson, 2006) seem to help avoid NA, but not to actively promote PA. Furthermore, in the present study the balance between positive and negative affect (i.e., AB) was related to transcendence strengths, suggesting that transcendence (and not temperance strengths) are important for experiencing more PA than NA, and that creating positive experiences may be more important than avoiding negative ones in facilitating a positive AB.

Second, only one study showed that character strengths are positively related to GSE (Ruch et al., in press). The present study supports this prior finding, and expands the relevance of specific character strengths for individuals living in a relatively stressful environment. Leadership strengths seem to be the most relevant strengths factor regarding GSE. Making things happen (leadership), being able to give and being asked for advise (perspective), searching for challenges (bravery), knowing the own motives (social intelligence), and taking joy in the enhancement of others with humor (humor; cf. Park & Peterson, 2006) are most important criteria which are associated with believing in the own efficacy to master things, and to see demands as challenging and not as threatening (cf. Jerusalem & Schwarzer, 1992).

Third, we tested the interplay between character strengths (i.e., leadership strengths) and GSE as buffer against negative effects of difficulties (Jerusalem & Schwarzer, 1992; Park, 2004), and their impact on LS in a mediation model. As a very promising result, leadership strengths (e.g., character strengths like perspective, leadership, bravery) seem to be a needed factor for young people to experience the capability to master life also in challenging environments. Such a successful mastery seems to be in line with higher degrees in LS. This indicates that character strengths seem to be important resources also under very difficult conditions.

4.1 Limitations and future research

These initial findings in Israeli adolescents need to be interpreted in the context of some limitations. The Hebrew VIA-Youth seems to be a reliable measure of the character strengths included in the VIA classification within the age group of 13-18 year-olds. However, future research is needed to confirm its reliability and validity in Israeli children and adolescents over a wider age range (i.e., 10 to 17 years) with a special focus on the three scales that emerged in the present study with a coefficient alpha of below .65. The same is necessary for the Affect Balance Scale, which needs to be studied more detailed in Israeli

adolescents. Another limitation is that the present results are based on cross-sectional data, and thus cannot establish causality. To unravel the promising results of the mediator analysis, longitudinal designs are needed to derive causal inferences regarding the role of character strengths for adolescents' SWB and GSE. Furthermore, as the present study used self-report assessments, future research might incorporate also targets' reports of significant others (e.g., peers, parents) to validate the self-report data.

To conclude, character strengths are defined as contributing to a good and fulfilling life (Peterson & Seligman, 2004). The presented results of a sample of Israeli adolescents show that higher-order strengths factors contribute to several indicators of a good and fulfilling life, namely higher global life satisfaction, higher positive affect, lower negative affect, a positive affect balance, and higher self-efficacy beliefs. Character strengths as positively valued personality traits seem to play an important role for a life that is most worth living also in such a demanding and dangerous environment. Such knowledge might be useful to be implemented in intervention studies that are designed to improve protective factors (i.e., character strengths) in young individuals.

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Table 1

Summary of Variables and Factor Loadings for Varimax Orthogonal Five-Factor Solution for the Hebrew VIA-Youth

	Factor loading					
Variables	1	2	3	4	5	Communality
Perspective	**.78**	.19	.22	.05	.25	.76
Leadership	**.74**	.07	.19	.07	.13	.61
Humor	**.67**	-.01	-.01	.39	-.09	.60
Social intelligence	**.61**	.15	-.03	.25	.44	.65
Bravery	**.54**	.43	.29	.11	-.14	.60
Modesty	.02	**.79**	-.07	-.09	.04	.64
Fairness	.18	**.70**	.27	.03	.25	.66
Teamwork	.38	**.64**	.11	.26	.18	.66
Kindness	.49	**.57**	.15	.16	.10	.62
Honesty	.12	**.54**	.19	.27	.30	.50
Forgiveness	-.13	**.53**	.13	.38	.14	.48
Curiosity	.15	.01	**.80**	-.05	.07	.66
Love of learning	.02	.24	**.79**	.21	.19	.75
Creativity	.48	-.06	**.64**	.07	.16	.66
Beauty	.06	.29	**.58**	.20	.04	.46
Religiousness	-.01	.08	-.01	**.69**	-.01	.48
Gratitude	.35	.27	.18	**.60**	.13	.61
Love	.49	.16	.01	**.60**	.09	.63
Zest	.41	.01	.35	**.59**	.04	.65
Hope	.40	.03	.32	**.53**	.24	.59
Prudence	.10	.04	.04	.01	**.86**	.76

Self-regulation	-.07	.37	.05	.07	**.61**	.52
Open-mindedness	.36	.17	.32	-.04	**.60**	.62
Perseverance	.19	.22	.29	.29	**.51**	.51
Explained variance [%]	15.98	13.00	11.53	11.62	9.97	

Note. $N = 396$. Boldface indicates highest factor loadings. 1 = Leadership strengths. 2 = Other-directed strengths. 3 = Intellectual strengths. 4 = Transcendence strengths. 5 = Temperance strengths.

Table 2

Zero-Order Correlations Among Components of Subjective Well-Being (i.e., Life Satisfaction, Positive Affect, Negative Affect, and Affect Balance), and General Self-Efficacy Beliefs

Variables	1.	2.	3.	4.
1. SWLS	---			
2. PA	.44***	---		
3. NA	-.30***	-.02	---	
4. AB	.52***	.70***	-.73***	---
5. GSE[a]	.35***	.34***	-.17**	.35***

Note. *N* = 394-396. *SWLS* = Global life satisfaction. *PA* = Positive affect. *NA* = Negative affect. *AB* = Affect balance. *GSE* = General self-efficacy.

[a] $n = 281$.

**$p < .01$. ***$p < .001$.

Table 3

Hierarchical Regression Summary for Age, Gender, and Five Strengths Factors Predicting SWB (i.e., Global Life Satisfaction, Positive Affect, Negative Affect, Affect Balance)

Step and predictor variable	*B*	*SE B*	β	R^2	ΔR^2
Global life satisfaction (SWLS)					
Step 1				.01	
Age	.05	.03	.08		
Gender	-.12	.10	-.06		
Step 2:				.33***	.32***
Leadership strengths	.25	.04	.25***		
Other-directed strengths	.06	.05	.06		
Intellectual strengths	.09	.04	.09*		
Transcendence strengths	.50	.04	.49***		
Temperance strengths	.10	.04	.10*		
Positive affect (PA)					
Step 1				.01	
Age	-.03	.02	-.09		
Gender	-.03	.06	-.03		
Step 2				.29***	.28***
Leadership strengths	.17	.02	.31***		
Other-directed strengths	.00	.03	.01		
Intellectual strengths	.12	.02	.21***		
Transcendence strengths	.21	.03	.38***		
Temperance strengths	.01	.02	.02		
Negative affect (NA)					
Step 1				.02	

Age	-.05	.02	-.12*		
Gender	.05	.06	.04		
Step 2				.17***	.15***
Leadership strengths	-.08	.03	-.14**		
Other-directed strengths	-.06	.03	-.10*		
Intellectual strengths	.06	.03	.10*		
Transcendence strengths	-.15	.03	-.26***		
Temperance strengths	-.13	.03	-.22***		
	Affect balance (AB)				
Step 1				.00	
Age	.02	.03	.03		
Gender	-.08	.08	-.05		
Step 2				.34***	.34***
Leadership strengths	.25	.03	.31***		
Other-directed strengths	.06	.04	.08		
Intellectual strengths	.06	.03	.07		
Transcendence strengths	.36	.04	.45***		
Temperance strengths	.14	.03	.17***		

Note. $N = 394$.

*$p < .05$. **$p < .01$. ***$p < .001$.

Table 4

Hierarchical Regression Summary for Age, Gender, and Five Strengths Factors Predicting General Self-Efficacy Beliefs

Step and predictor variable	*B*	*SE B*	β	R^2	ΔR^2
Step 1				.02	
Age	.04	.02	.15*		
Gender	.00	.06	.00		
Step 2				.48***	.46***
Leadership strengths	.25	.02	.54***		
Other-directed strengths	.03	.02	.07		
Intellectual strengths	.16	.02	.31***		
Transcendence strengths	.07	.02	.14**		
Temperance strengths	.14	.02	.29***		

Note. $N = 281$.

*$p < .05$. **$p < .01$. ***$p < .001$.

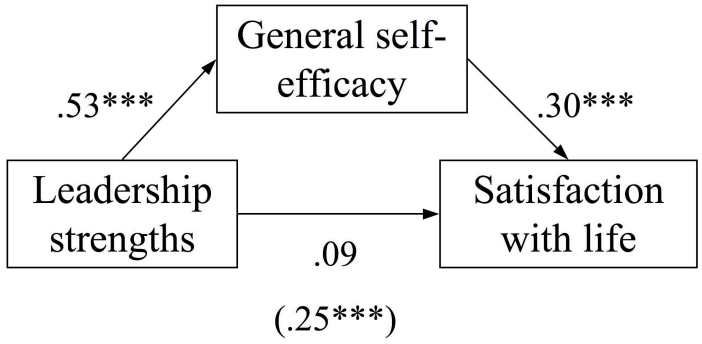

Figure 1. Standardized beta-coefficients for a model about the role of leadership strengths for global life satisfaction mediated by general self-efficacy ($N = 281$). Coefficient in parentheses represents the direct effect without the mediator variable. ***p < .001.